

MOBILE COMMUNICATIONS TERMINAL FOR SATELLITE
COMMUNICATIONS SYSTEM

ABSTRACT OF THE DISCLOSURE

A mobile communications system transporting messages between mobile terminals and a central control center using a satellite communications system. The central control center and the mobile terminals each store a plurality of message display forms each having a form identifier and a predetermined display format. The message display forms are selected as templates for generating user messages including message data supplied at the originating station. The satellite messages transmit the user message by transmitting the message data and the form identifier of the corresponding selected message display form. The receiving station, upon receiving the satellite message, accesses the message display form from memory in response to the supplied form identifier, and combines the accessed message display form with the message data to recreate the user message. The mobile terminals are designed as low-cost data terminals requiring a minimum amount of memory. The mobile terminals include a satellite transceiver, a graphic user interface providing a display and accepting key inputs from the user, and a software system including an application layer providing all messaging functions for the user and a middleware layer controlling transport of messages between the application layer and the satellite transceiver. The application layer operates as an event-based state machine, and includes an event handler that controls the application layer operations in accordance with the processing capacity of the middleware layer.